

Claims

[1] A cleaning member for semiconductor apparatus, which comprises a wafer and formed on at least one side thereof a cleaning layer made of a heat-resistant resin formed by thermally curing a poly(amic acid), and wherein the cleaning layer has a part wherein a wafer surface is exposed.

[2] The cleaning member for semiconductor apparatus according to claim 1, wherein that part in the cleaning layer in which a wafer surface is exposed is a part wherein the cleaning layer has been removed throughout the whole circular area having a given width ranging from the peripheral edge of the wafer toward the center thereof.

[3] A process for producing a cleaning member for semiconductor apparatus, characterized by producing the cleaning member for semiconductor apparatus of claim 1 or 2 through:

- a first step in which a varnish comprising a poly(amic acid) solution is produced;

- a second step in which the varnish is applied to a wafer surface;

- a third step in which the varnish applied on the wafer is dried;

- a fourth step in which part of the varnish on the wafer

is partly removed by dropping a solvent thereonto to thereby form a part wherein a wafer surface is exposed; and

a fifth step in which the residual coating film is cured at a temperature of 200°C or higher.

[4] A method of cleaning a semiconductor apparatus, characterized by conveying the cleaning member for semiconductor apparatus of claim 1 or 2 in the semiconductor apparatus to thereby remove foreign matters adherent to inner parts of the semiconductor apparatus.

[5] A process for producing a cleaning member for semiconductor apparatus, which comprises a wafer and formed on at least one side thereof a cleaning layer made of a heat-resistant resin formed by thermally curing a poly(amic acid), and wherein the cleaning layer has a part where a wafer surface is exposed, characterized by comprising:

- (1) a step in which a varnish comprising a poly(amic acid) solution is obtained,
 - (2) a step in which the varnish is applied to a wafer,
 - (3) a step in which the varnish applied on the wafer is dried, and
 - (4) a step in which the coating film after the drying is cured at a temperature of 200°C or higher,
- wherein the step (2) comprises horizontally and rotatably

fixing the wafer to the top of a table, disposing a horizontally movable coating nozzle over the wafer, ejecting the varnish from the nozzle while rotating the wafer and horizontally moving the nozzle to thereby spirally apply the varnish to the wafer so as not to leave a space between the spiral curves, and regulating that area in the wafer surface which is to be thus coated to thereby leave an uncoated part wherein a wafer surface is exposed.

[6] The process for producing a cleaning member for semiconductor apparatus of claim 5, wherein the uncoated part wherein a wafer surface is exposed is the whole circular area having a given width ranging from the peripheral edge of the wafer toward the center thereof.